<u>REMARKS</u>

<u>STATUS OF THE SPECIFICATION</u>

[0001] Applicants have amended the title to reflect the claim types currently in the application. Applicants note that the claim count regarding independent and/or dependent claims is at least the same as or fewer than those in the original application and thus no additional claim fees should be assessed.

<u>STATUS OF THE CLAIMS</u>

[0002] Claims 1, 3-5, 7, 8, and 19 are pending in the application. Claims 1 and 19 are hereby amended. New Claims 21-29 are being added by this amendment.

[0003] Claims 1 and 19 have been amended to clearly recite hardware components in conjunction with the operations performed in the method claim of Claim 1 and the computer-implemented method of Claim 19. In particular, Claim 1 is amended to recite "<u>the browsing conducted by way of a processor in communication with a memory storing the work queue</u>." Claim 19 is amended to recite a computer-implemented method comprising "executing a computer program product <u>on a processor in communication with a memory, the computer program product</u>." Applicants submit that these clarifications establish Claims 1 and 19 and their dependent claims as statutory subject matter in accordance with 35 U.S.C. §101 and recent court decisions on the matter. Claims 1 and 19 are also amended to resolve a lack of antecedent basis for the term "real update request."

[0004] New Claims 21-29 are added to incorporate claim sets to other statutory classes a computer program product (Claim 21) and a system (Claim 25). New Claims 21-29 incorporate all of the amendments made to Claims 1, 3-5, 7, 8, and 19 that have secured allowance of those claims. To facilitate a comparison of the incorporation of this same subject matter. Applicants

are including an appendix that includes just new claims 21-29 with markup showing how original Claims 9-18 have been amended. Note that in the appendix canceled claims have been omitted.

[0005] These new claims are derived from the previously canceled Claims 9-18. Claims 9-18 were originally rejected under 35 U.S.C. 112, first paragraph for lack of enablement on the grounds that the phrase "computer readable medium" is not defined in the specification. Claims 9-18 were originally rejected under 35 U.S.C. 112, second paragraph for indefiniteness on the grounds that the phrase "computer readable medium" is not defined in the specification. Applicants have amended Claim 21 such that Claim 21 recites a computer program product and no reference to "computer readable medium." Applicants submit that support for this amendment is in the specification in paragraph 38 which recites "the **computer program** comprising **program code means** adapted to perform." (emphasis added).

[0006] Claim 25 recites a system and complies with the enablement requirements and definiteness requirements of 35 U.S.C. 112, first and second paragraphs as the limitations of a processor and memory are well known to those of skill in the art. Furthermore, the description of Figure 2 and Figure 2 itself provide enablement and description in support of Claim 25.

[0007] Claims 10-13 (now represented by Claims 22-24) were originally rejected under 35 U.S.C. 112, second paragraph for lack of enablement and due to improper dependency. Claims 22-24 each recite a computer program product which is consistent with the claim type of Claim 21. Applicants respectfully submit that Claims 22-24 are in condition for allowance.

[0008] Claims 9-18 were originally rejected under 35 U.S.C. §101 as non-statutory subject matter. Claim 21 recites "the computer usable program code executed by a processor in

communication with a memory storing the computer usable program code." (emphasis added). Claim 21 recites "a processor in communication with a memory comprising." (emphasis added). Applicants submit that these clarifications establish Claims 1 and 19 and their dependent claims as statutory subject matter in accordance with 35 U.S.C. §101 and recent court decisions on the matter.

<div align="center">Notice of Allowability</div>

[0009] Applicants note that the Notice of Allowability failed to indicate an acknowledgement of foreign priority (Item 3 and sub item 1-3 regarding certified copies of priority documents). Applicants note that the office action mailed 11 March 2008 included proper acknowledgement of foreign priority and the certified copies. Applicants respectfully request that in the subsequent Notice of Allowability that this typographical error be corrected.

<div align="center">CONCLUSION</div>

[0010] Applicants submit that the amendments to the claims put all the claims in condition for allowance. In the event the Examiner finds any remaining impediment to the prompt allowance of any of these claims, which could be clarified in a telephone conference, the Examiner is respectfully urged to initiate the same with the undersigned.


Respectfully submitted,

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Appendix

21.   (New) A computer program product ~~comprising a computer readable storage medium~~

~~having computer usable program code~~ for pre-processing at a database management

system (DBMS) of update requests to a database controlled by the DBMS, the computer

program product comprising:

computer usable program code for receiving an update request at the DBMS<u>, the computer</u>

<u>usable program code executed by a processor in communication with a memory storing</u>

<u>the computer usable program code, the update request queued at least a predetermined</u>

<u>number of messages ahead of a currently executing database request, the work queue</u>

<u>comprising a combination of update requests and database requests received for the</u>

<u>database management system (DBMS)</u>;

computer usable program code for receiving an indication at the DBMS indicating that the

update request is a pretend update request that directs the DBMS to not execute an update

request but instead to prefetch data for the update request;

computer usable program code for translating the pretend update request into a prefetch request;

~~and~~

computer usable program code for prefetching required data based on the prefetch request<u>, the</u>

<u>prefetched data required for when the update request is processed</u>~~.~~;

<u>wherein the prefetch request has a predetermined form comprising at least an identifier and the</u>

<u>computer program product further comprises,</u>

computer usable program code for retaining the predetermined form of the prefetch request;

computer usable program code for associating the identifier with the retained predetermined form in order that the predetermined form can be identified and used in subsequent performance of a real update request, such that the retained predetermined form is used by the DBMS in place of parsing the real update request; and

computer usable program code for returning the identifier in response to the pretend update request.

22. (New) The ~~method~~ computer program product of claim 21 further comprising computer usable program code for receiving ~~a~~ the real update request at the DBMS and executing the real update request using previously prefetched data.

23. (New) The ~~method~~ computer program product of claim 21 further comprising computer usable program code for receiving the identifier with ~~a~~ the real update request, and computer usable program code for using the predetermined form associated with the identifier in performance of the real update request.

24. (New) The ~~method~~ computer program product of claim 21 further comprising computer usable program code for informing a memory manager that the prefetched data may be discarded from memory subsequent to the use of the prefetched data in the processing of ~~a~~ the real update request.

25. (New) A <u>system</u> ~~computer program product comprising a computer readable medium having computer usable program code~~ for processing a queue of messages, each message representing at least one request for an update to a database, the <u>system</u> ~~computer program product~~ comprising:

<u>a processor in communication with a memory comprising,</u>

computer usable program code for browsing ~~an~~ unexecuted message<u>s of a work queue for an</u> <u>update request, the update request queued at least a predetermined number of messages</u> <u>ahead of a currently executing database request, the work queue comprising a</u> <u>combination of update requests and database requests received for a database</u> <u>management system (DBMS)</u>;

computer usable program code for ~~extracting an~~ <u>identifying the</u> update request from an unexecuted message<u> in the work queue</u>; ~~and~~

<u>computer usable program code for sending a pretend update request to the DBMS responsible for</u> <u>the database which is to be updated, the pretend update request derived from the update</u> <u>request;</u>

computer usable program code for translating the <u>pretend</u> update request into a <u>prefetch</u> ~~query~~ request <u>comprising an indication that directs the DBMS to not execute an update</u> <u>operation, but instead to prefetch data that will be required when</u> ~~to prefetch data for~~ the unexecuted update request<u> is processed; and</u>~~.~~

<u>wherein the prefetch request has a predetermined form comprising at least an identifier and the</u> <u>computer program product further comprises,</u>

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computer usable program code for retaining the predetermined

form of the prefetch request;

computer usable program code for associating the identifier with

the retained predetermined form in order that the

predetermined form can be identified and used in

subsequent performance of a real update request, such that

the retained predetermined form is used by the DBMS in

place of parsing the real update request; and

computer usable program code for returning the identifier in

response to the pretend update request.


26. (New) The system ~~computer program product~~ of claim ~~14~~ 25 further comprising

computer usable program code for initiating a real update request by destructively getting

a message from a queue comprising the update request, the real update request using

prefetched data.


27. (New) The system ~~computer program product~~ of claim ~~15~~ 26 further comprising

computer usable program code wherein initiating a real update request is performed by a

master thread and browsing a message is performed by one or more read ahead threads.


28. (New) The system ~~computer program product~~ of claim ~~16~~ 27 further comprising

computer usable program code wherein processing of the master thread is maintained

behind the read ahead thread by a predetermined ~~amount~~number of messages.

29. (New) The ~~system~~ ~~computer program product~~ of claim ~~14~~ 25 further comprising

computer usable program code for informing a memory manager that the prefetched data

used may be discarded from memory subsequent to the use of the prefetched data in the

processing of ~~a~~ the real update request.